FIG. 1

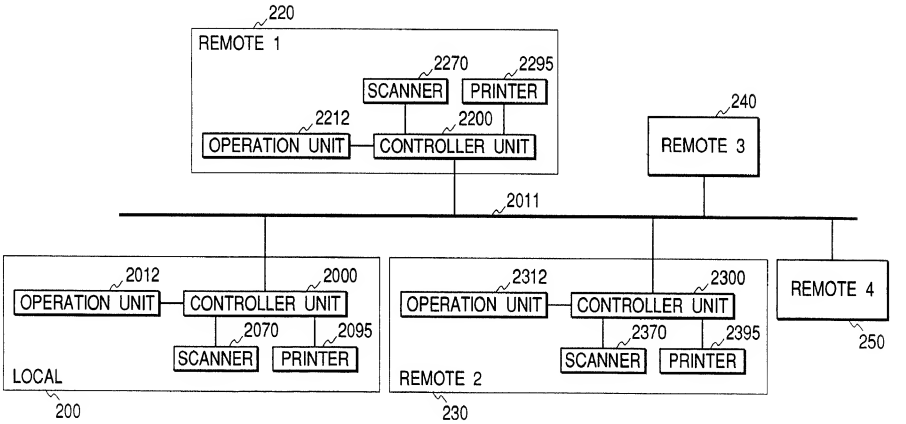
220
REMOTE 1
2270
SCANNER
2295
PRINTER
2212
OPERATION UNIT
2200
CONTROLLER UNIT
240
REMOTE 3
2011
2012
OPERATION UNIT
2000
CONTROLLER UNIT
2070
SCANNER
2095
PRINTER
LOCAL
200
2312
OPERATION UNIT
2300
CONTROLLER UNIT
2370
SCANNER
2395
PRINTER
REMOTE 2
230
REMOTE 4
250

FIG. 2

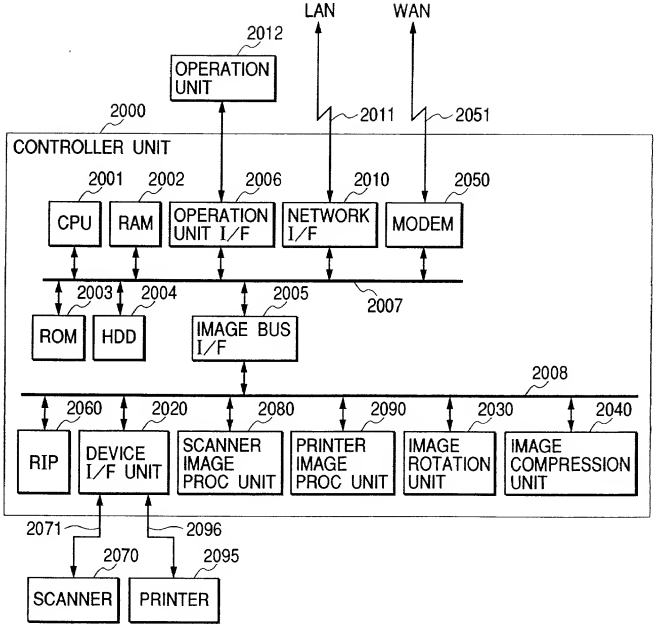
LAN
WAN
2012
OPERATION UNIT
2000
2011
2051
CONTROLLER UNIT
2001
2002
2006
2010
2050
CPU
RAM
OPERATION UNIT I/F
NETWORK I/F
MODEM
2003
2004
2005
2007
ROM
HDD
IMAGE BUS I/F
2008
2060
2020
2080
2090
2030
2040
RIP
DEVICE I/F UNIT
SCANNER IMAGE PROC UNIT
PRINTER IMAGE PROC UNIT
IMAGE ROTATION UNIT
IMAGE COMPRESSION UNIT
2071
2096
2070
2095
SCANNER
PRINTER

FIG. 3

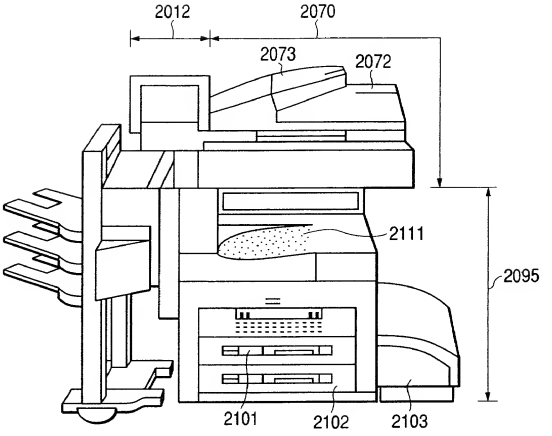
2012
2070
2073
2072
2111
2095
2101
2102
2103

FIG. 4

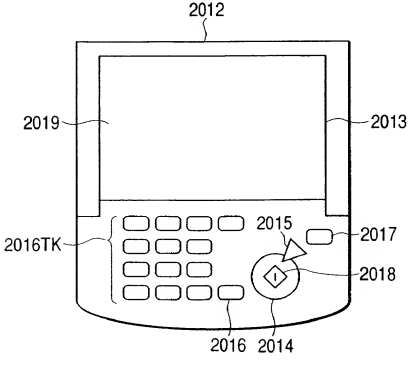
2012
2019
2013
2015
2017
2016TK
2018
2016
2014

FIG. 5

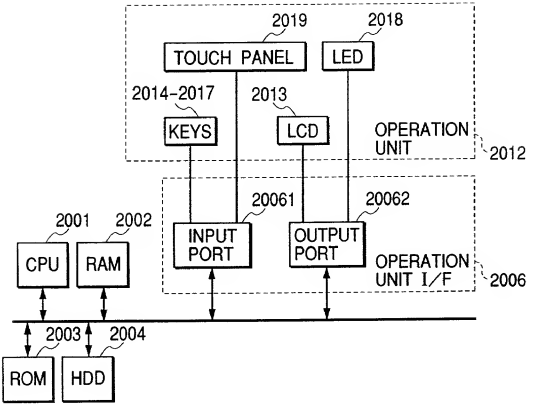
2019
2018
TOUCH PANEL
LED
2014-2017
2013
KEYS
LCD
OPERATION UNIT
2012
20061
20062
2001
2002
INPUT PORT
OUTPUT PORT
CPU
RAM
OPERATION UNIT I/F
2006
2003
2004
ROM
HDD

FIG. 6

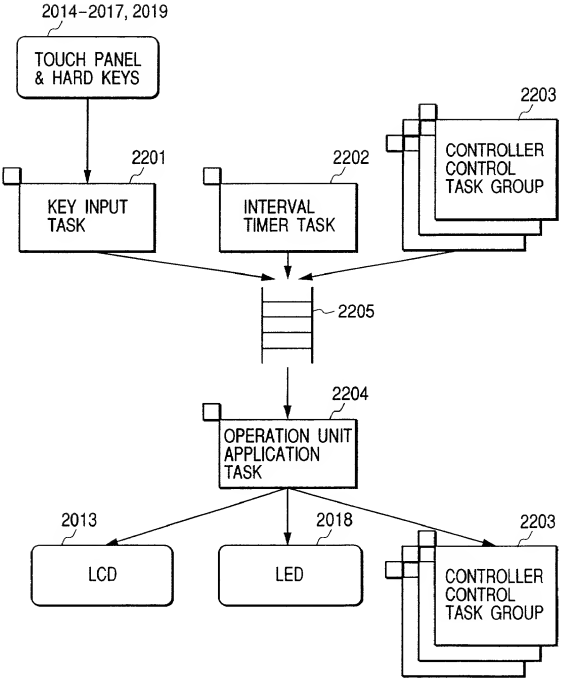
2014-2017, 2019
TOUCH PANEL & HARD KEYS
2201
KEY INPUT TASK
2202
INTERVAL TIMER TASK
2203
CONTROLLER CONTROL TASK GROUP
2205
2204
OPERATION UNIT APPLICATION TASK
2013
LCD
2018
LED
2203
CONTROLLER CONTROL TASK GROUP

FIG. 7

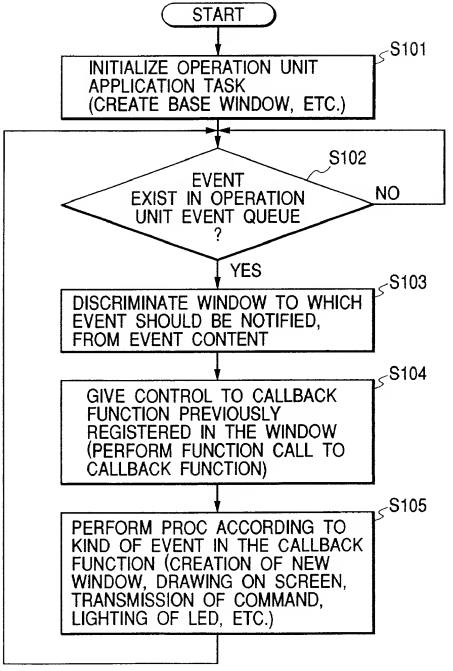
START
S101
INITIALIZE OPERATION UNIT APPLICATION TASK (CREATE BASE WINDOW, ETC.)
S102
EVENT EXIST IN OPERATION UNIT EVENT QUEUE ?
NO
YES
S103
DISCRIMINATE WINDOW TO WHICH EVENT SHOULD BE NOTIFIED, FROM EVENT CONTENT
S104
GIVE CONTROL TO CALLBACK FUNCTION PREVIOUSLY REGISTERED IN THE WINDOW (PERFORM FUNCTION CALL TO CALLBACK FUNCTION)
S105
PERFORM PROC ACCORDING TO KIND OF EVENT IN THE CALLBACK FUNCTION (CREATION OF NEW WINDOW, DRAWING ON SCREEN, TRANSMISSION OF COMMAND, LIGHTING OF LED, ETC.)

FIG. 8

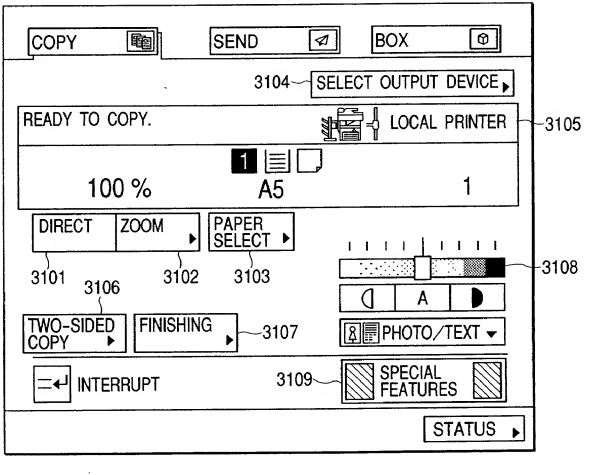
COPY
SEND
BOX
3104
SELECT OUTPUT DEVICE
READY TO COPY.
LOCAL PRINTER
3105
1
100 %
A5
1
DIRECT
ZOOM
PAPER SELECT
3101
3106
3102
3103
3108
A
TWO-SIDED COPY
FINISHING
3107
PHOTO/TEXT
INTERRUPT
3109
SPECIAL FEATURES
STATUS

FIG. 9

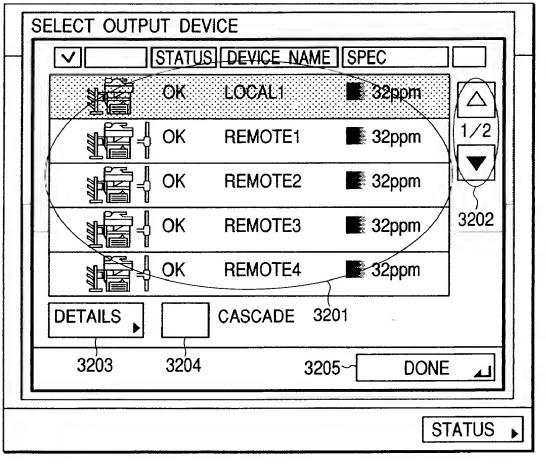
SELECT OUTPUT DEVICE
STATUS
DEVICE NAME
SPEC
OK
LOCAL1
32ppm
OK
REMOTE1
32ppm
OK
REMOTE2
32ppm
OK
REMOTE3
32ppm
OK
REMOTE4
32ppm
1/2
3202
DETAILS
CASCADE
3201
3203
3204
3205
DONE
STATUS

FIG. 10

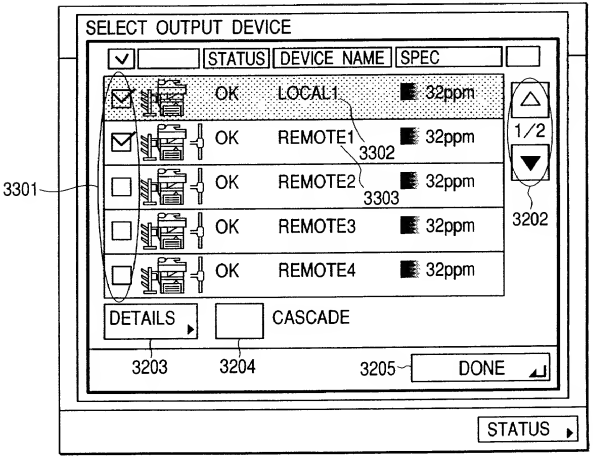
SELECT OUTPUT DEVICE
STATUS
DEVICE NAME
SPEC
OK
LOCAL1
32ppm
OK
REMOTE1
32ppm
OK
REMOTE2
32ppm
OK
REMOTE3
32ppm
OK
REMOTE4
32ppm
1/2
3301
3302
3303
3202
DETAILS
CASCADE
3203
3204
3205
DONE
STATUS

FIG. 11

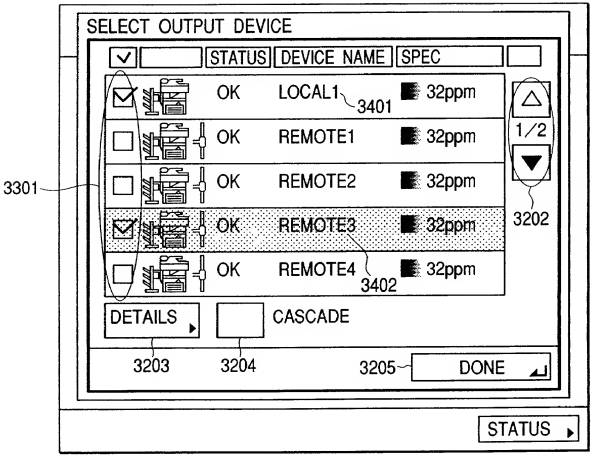
SELECT OUTPUT DEVICE
STATUS
DEVICE NAME
SPEC
OK
LOCAL1
32ppm
3401
OK
REMOTE1
32ppm
OK
REMOTE2
32ppm
OK
REMOTE3
32ppm
OK
REMOTE4
32ppm
3402
1/2
3202
3301
DETAILS
CASCADE
3203
3204
3205
DONE
STATUS

FIG. 12

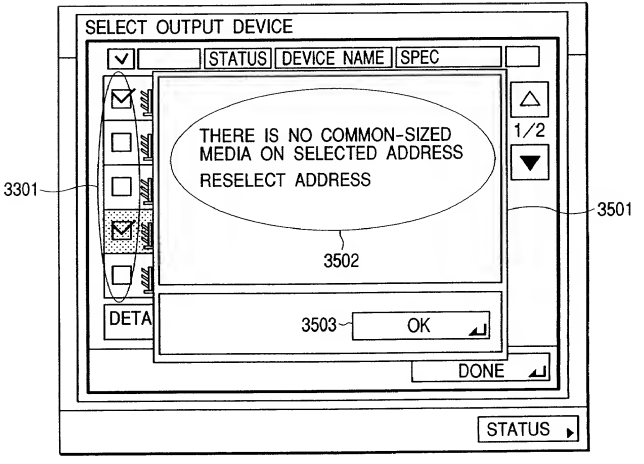
SELECT OUTPUT DEVICE
STATUS
DEVICE NAME
SPEC
THERE IS NO COMMON-SIZED MEDIA ON SELECTED ADDRESS
RESELECT ADDRESS
1/2
3301
3501
3502
DETA
3503
OK
DONE
STATUS

FIG. 13

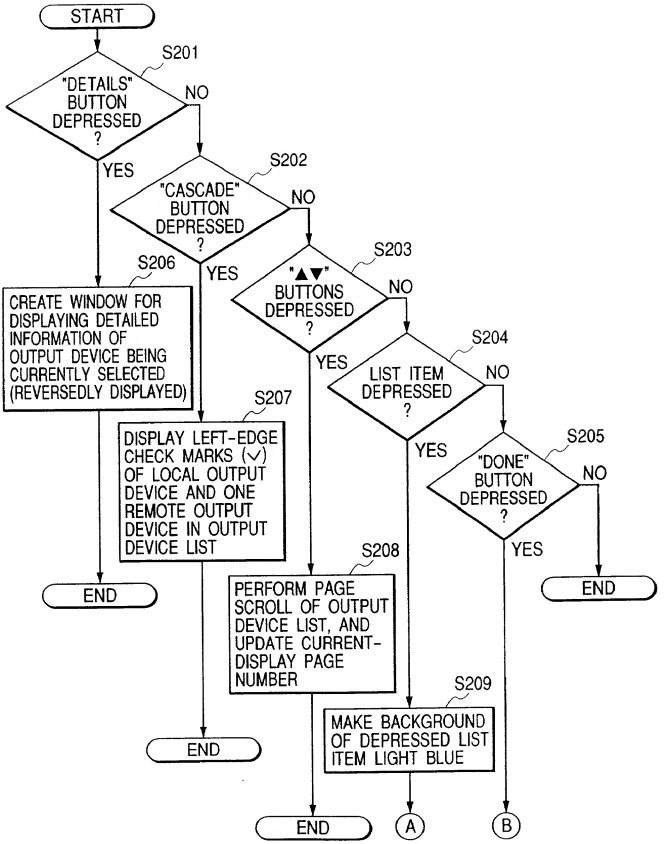
START
S201
"DETAILS" BUTTON DEPRESSED ?
NO
YES
S202
"CASCADE" BUTTON DEPRESSED ?
NO
YES
S203
"▲▼" BUTTONS DEPRESSED ?
NO
YES
S204
LIST ITEM DEPRESSED ?
NO
YES
S205
"DONE" BUTTON DEPRESSED ?
NO
YES
S206
CREATE WINDOW FOR DISPLAYING DETAILED INFORMATION OF OUTPUT DEVICE BEING CURRENTLY SELECTED (REVERSEDLY DISPLAYED)
S207
DISPLAY LEFT-EDGE CHECK MARKS (✓) OF LOCAL OUTPUT DEVICE AND ONE REMOTE OUTPUT DEVICE IN OUTPUT DEVICE LIST
S208
PERFORM PAGE SCROLL OF OUTPUT DEVICE LIST, AND UPDATE CURRENT-DISPLAY PAGE NUMBER
S209
MAKE BACKGROUND OF DEPRESSED LIST ITEM LIGHT BLUE
END
END
END
END
A
B

FIG. 14

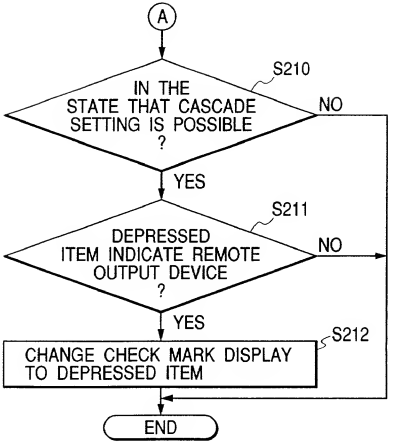
A
S210
IN THE STATE THAT CASCADE SETTING IS POSSIBLE ?
NO
YES
S211
DEPRESSED ITEM INDICATE REMOTE OUTPUT DEVICE ?
NO
YES
S212
CHANGE CHECK MARK DISPLAY TO DEPRESSED ITEM
END

FIG. 15

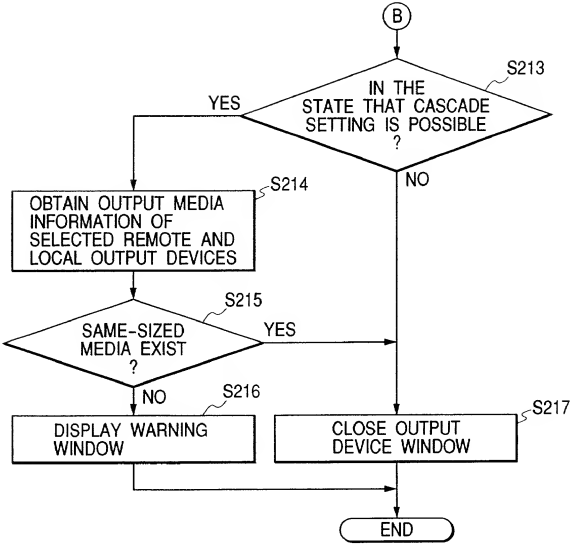
B
S213
IN THE STATE THAT CASCADE SETTING IS POSSIBLE ?
YES
NO
S214
OBTAIN OUTPUT MEDIA INFORMATION OF SELECTED REMOTE AND LOCAL OUTPUT DEVICES
S215
SAME-SIZED MEDIA EXIST ?
YES
NO
S216
DISPLAY WARNING WINDOW
S217
CLOSE OUTPUT DEVICE WINDOW
END

FIG. 16

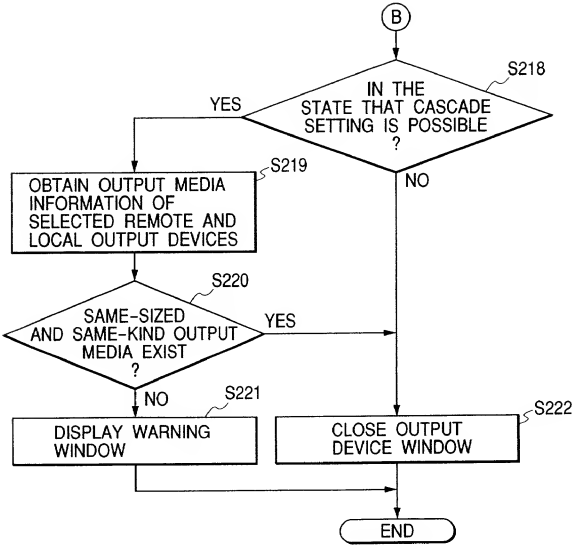
B
S218
IN THE STATE THAT CASCADE SETTING IS POSSIBLE ?
YES
NO
S219
OBTAIN OUTPUT MEDIA INFORMATION OF SELECTED REMOTE AND LOCAL OUTPUT DEVICES
S220
SAME-SIZED AND SAME-KIND OUTPUT MEDIA EXIST ?
YES
NO
S221
DISPLAY WARNING WINDOW
S222
CLOSE OUTPUT DEVICE WINDOW
END

FIG. 17

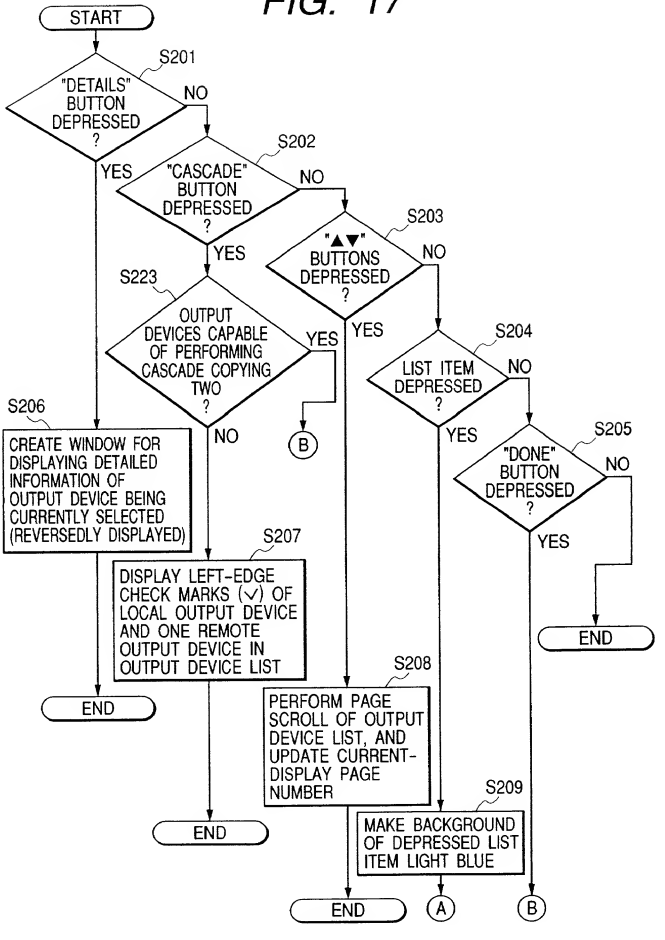
START
S201
"DETAILS" BUTTON DEPRESSED ?
NO
YES
S202
"CASCADE" BUTTON DEPRESSED ?
NO
YES
S203
"▲▼" BUTTONS DEPRESSED ?
NO
YES
S223
OUTPUT DEVICES CAPABLE OF PERFORMING CASCADE COPYING TWO ?
YES
NO
B
S204
LIST ITEM DEPRESSED ?
NO
YES
S205
"DONE" BUTTON DEPRESSED ?
NO
YES
END
S206
CREATE WINDOW FOR DISPLAYING DETAILED INFORMATION OF OUTPUT DEVICE BEING CURRENTLY SELECTED (REVERSEDLY DISPLAYED)
S207
DISPLAY LEFT-EDGE CHECK MARKS (✓) OF LOCAL OUTPUT DEVICE AND ONE REMOTE OUTPUT DEVICE IN OUTPUT DEVICE LIST
END
S208
PERFORM PAGE SCROLL OF OUTPUT DEVICE LIST, AND UPDATE CURRENT-DISPLAY PAGE NUMBER
END
S209
MAKE BACKGROUND OF DEPRESSED LIST ITEM LIGHT BLUE
END
A
B

FIG. 18

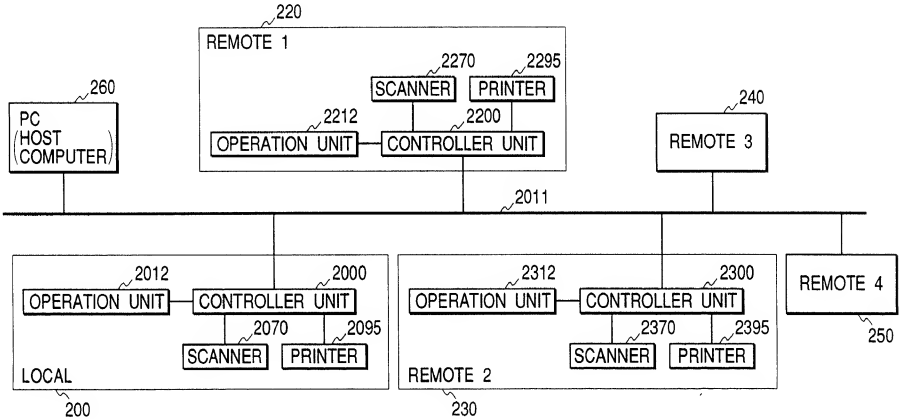
220
REMOTE 1
2270
2295
SCANNER
PRINTER
260
PC
(HOST
COMPUTER)
2212
2200
OPERATION UNIT
CONTROLLER UNIT
240
REMOTE 3
2011
2012
2000
OPERATION UNIT
CONTROLLER UNIT
2070
2095
SCANNER
PRINTER
LOCAL
200
2312
2300
OPERATION UNIT
CONTROLLER UNIT
2370
2395
SCANNER
PRINTER
REMOTE 2
230
REMOTE 4
250

FIG. 19

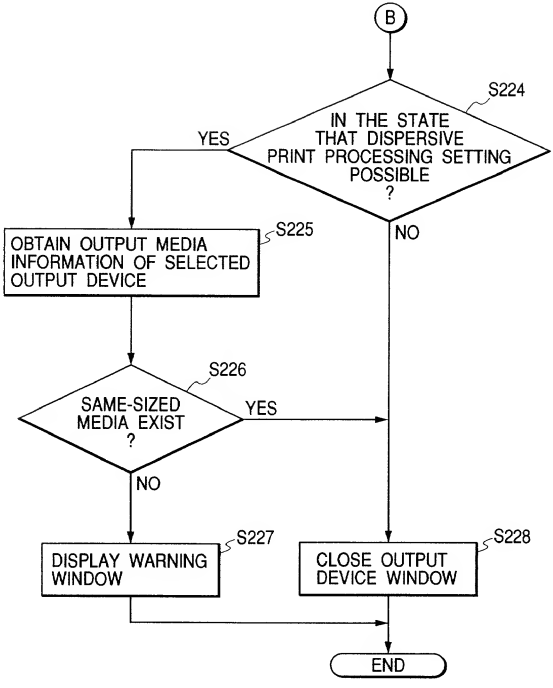
B
S224
IN THE STATE THAT DISPERSIVE PRINT PROCESSING SETTING POSSIBLE ?
YES
NO
OBTAIN OUTPUT MEDIA INFORMATION OF SELECTED OUTPUT DEVICE
S225
S226
SAME-SIZED MEDIA EXIST ?
YES
NO
DISPLAY WARNING WINDOW
S227
CLOSE OUTPUT DEVICE WINDOW
S228
END

FIG. 20

RECORDING MEDIUM SUCH AS FD/CD-ROM

DIRECTORY INFORMATION
FIRST DATA PROCESSING PROGRAM PROGRAM CODE GROUP CORRESPONDING TO STEPS OF FLOW CHART SHOWN IN FIG. 7
SECOND DATA PROCESSING PROGRAM PROGRAM CODE GROUP CORRESPONDING TO STEPS OF FLOW CHARTS SHOWN IN FIGS. 13 TO 15
THIRD DATA PROCESSING PROGRAM CONTROL PROGRAM CODE GROUP CORRESPONDING TO EACH TASK IN TASK STRUCTURE SHOWN IN FIG. 6
FOURTH DATA PROCESSING PROGRAM PROGRAM CODE GROUP CORRESPONDING TO STEPS IN FLOW CHARTS SHOWN IN FIGS. 13 TO 14 AND 16
FIFTH DATA PROCESSING PROGRAM PROGRAM CODE GROUP CORRESPONDING TO STEPS IN FLOW CHARTS SHOWN IN FIGS. 14 TO 15 AND 17
SIXTH DATA PROCESSING PROGRAM PROGRAM CODE GROUP CORRESPONDING TO STEPS IN FLOW CHART SHOWN IN FIG. 19

MEMORY MAP OF STORAGE MEDIUM